

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILI	NG DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/055,792	01/	18/2002	Steven A. Thiel	10541/1074	7451	
29074 7.	590	03/04/2004		EXAM	EXAMINER	
VISTEON 29	074		PIAZZA CORCORAN, GLADYS JOSEFINA			
BRINKS HOF	ER GILSO	ON & LIONE				
P.O. BOX 1039				ART UNIT	PAPER NUMBER	
CHICAGO, IL 60611				1733		

DATE MAILED: 03/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

			mr_				
	Application No.	Applicant(s)					
	10/055,792	THIEL ET AL.					
Office Action Summary	Examiner	Art Unit					
	Gladys J Piazza Corcoran	1733					
The MAILING DATE of this communication a	ppears on the cover sheet with the	correspondence address					
Period for Reply		(A) 50014					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1) Responsive to communication(s) filed on 15	1) Responsive to communication(s) filed on <u>15 December 2003</u> .						
•	his action is non-final.						
3) Since this application is in condition for allow	vance except for formal matters, p	rosecution as to the meri	its is				
closed in accordance with the practice unde	r <i>Ex par</i> te Quayle, 1935 C.D. 11, ⁴	153 O.G. 213.					
Disposition of Claims							
4)⊠ Claim(s) <u>1-3 and 5-12</u> is/are pending in the	application.						
4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
6) Claim(s) 1-3 and 5-12 is/are rejected.							
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and	d/or election requirement.						
Application Papers							
9) The specification is objected to by the Examiner.							
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for fore	ign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a) ☐ All b) ☐ Some * c) ☐ None of:							
1. Certified copies of the priority docume							
2. Certified copies of the priority docume	ents have been received in Applica	ation No					
3. Copies of the certified copies of the priority documents have been received in this National Stage							
	application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s)							
1) Notice of References Cited (PTO-892)	4) Interview Summa						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail 5) Notice of Informa	Date I Patent Application (PTO-152))				
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/Paper No(s)/Mail Date	6) Other:	, , , , ,					

Art Unit: 1733

DETAILED ACTION

Claim Objections

1. Claim 11 is objected to because of the following informalities: Claim 11, line 3 recites "said said" which should be --said--.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 4. Claims 1, 5, 9, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roth US Patent No. (6,179,145) in view of Walter (WO 00/56564 with US Patent No. 6,606,980 as the English equivalent).

Art Unit: 1733

Roth discloses a method for assembling a fuel delivery system by thermoforming a first shell portion (14) and a second shell portion (16) of a fuel tank (10) (column 2, lines 34-59; column 3, lines 23-25), forming a fuel tank access aperture (opening 56) in at least one of said first and second shell portions for allowing access to components within the tank (column 3, lines 30-36), and sealingly connecting said first and second shell portions to form a fuel tank to enclose the components within said fuel tank (column 3, lines 26-27).

Roth discloses that components (including pumps) are disposed within the tank prior to welding shut the two shell portions, and shows annular wall 21 to form a reservoir, however it is unclear how the reservoir is formed and fixed to the bottom shell 14. It is considered well known in the art to fixedly attach reservoir assemblies with reservoir units within fuel tanks in order to have continuous flow of the fuel even during tilting of the tank. For example, Walter discloses providing a reservoir assembly having a reservoir unit (12) and fixing said reservoir assembly to the bottom wall of the tank (the unit is fixed to the shell by being held within holding unit 30; column 4, lines 23-30) in order to provide fuel to the pump during extreme operating positions of the motor (column 1, lines 1-55). Furthermore, the reservoir unit in Walter also provides for closed tops in order to prevent sloshing of the fuel (column 2, liens 45-50). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the method of forming a fuel delivery system as shown by Roth with a reservoir unit fixed to one of the shells in order to provide fuel at the fuel intake opening of the fuel pump even

Art Unit: 1733

in extreme operating states of the motor vehicle and covered tops in order to prevent sloshing as shown by Walter.

As to claim 9, Roth discloses a plurality of thermoformed shell portions (14 and 16) for a fuel tank (10), with at least one having a fuel tank access aperture (opening 56) and Walter as discussed above discloses a non-integral reservoir assembly comprising a reservoir unit (12) having its smallest cross-sectional area being greater than the area of the fuel tank access aperture with the assembly configured to store fuel and being attached to one of the shell portions inside the fuel tank. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the tank in Roth with a reservoir having its smallest cross-sectional area being greater than the area of the fuel tank access aperture in order to provide fuel to the pump when the tank is in extreme operating states as shown by Walter particularly since the components are applied prior to sealing the shells in Roth, only the expected results would be attained.

As to claims 5 and 12, Roth discloses providing a cover (sealing cover 58), removably securing the cover to the first or second shell for sealing the fuel tank, and removing the cover after the first and second shell portions are connected together to allow access to the components in the tank. The cover in Roth seals the aperture from the outside of the tank. However, it is well known in the art to provide covers such as flanges that are disposed within the fuel tank access aperture. For example, Walter discloses one such example, cover 18. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the method of forming the fuel delivery system as shown by Roth by providing a flange disposed within the aperture as

Art Unit: 1733

a well known equivalent alternate to an outer cover as is considered well known in the art and exemplified by Walter, only the expected results would be attained.

5. Claims 2, 3, 7, 8, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roth in view of Walter as applied to claims 1, 6, 9 above, and further in view of Vorenkamp et al. (2002/0020487).

Walter discloses providing a holder for holding the reservoir assembly fixed to the tank, however does not disclose the specifics of the holder. Vorenkamp discloses it is known to provide holders for holding components to plastic fuel tanks where the holder uses a plurality of weld feet that are heat deformable structures attached to the reservoir assembly capable of forming a molecular bond with the tank walls in order to absorb stresses in from external sources. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the method of forming a fuel delivery system as shown by Roth and Walter with a holder that uses weld feet to fix the reservoir assembly to the shell in order to absorb stresses from external sources as shown by Vorenkamp.

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roth in view of Walter as applied to claim 9 above, and further in view of .

Roth discloses the reservoir assembly comprises a fuel pump (32), a fuel level sensor (float 40, arm 42, and level 44), inline fuel filter assembly (strainer 34), an auxiliary pump (jet pump), and a pressure regulator assembly (vent valve) (column 2, line 59 to column 3, line 5). Walter discloses a fuel pump (134) and inline fuel filter assembly (152, 127), and Walter discloses the importance of providing at least partial

Art Unit: 1733

closure of the tops of the reservoir assembly to prevent sloshing (column 2, lines 45-50, however does not particularly disclose a reservoir cover. It is well known in the art to provide the claims items in a reservoir system. For example, Tuckey discloses providing a reservoir assembly for fuel tank with an auxiliary pump (152), a fuel pump (62), a reservoir cover (90), an inline fuel filter assembly (140), a fuel pressure regulator assembly (valve column 2, lines 52-64), and a level sensor assembly (126) mounted to the reservoir unit. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the fuel delivery system as shown by Roth and Walter with conventional reservoir assembly parts in particular a cover in order to provide the proper functions of the system including preventing sloshing of the fuel out of the system as is well known in the art and further exemplified by Tuckey, only the expected results would be attained.

Response to Amendment

7. The Declaration and Documents filed on October 9, 2003 under 37 CFR 1.131 is sufficient to overcome the Beyer (2002/0053567) and Balzer (2002/0053568) references.

Response to Arguments

8. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gladys J Piazza Corcoran whose telephone number is

Art Unit: 1733

(571) 272-1214. The examiner can normally be reached on M-F 8am-5:30pm (alternate Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Gladys JP Corcoran

Examiner
Art Unit 1733

GJPC